

2013 Annual Drinking Water Quality Report

East Valley Water System

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Douglas County purchases water from the Town of Minden. Listed are the wells where your water comes from in the Town of Minden. For additional information on the Town of Minden water, please contact the Town of Minden at (775) 782-5976 or go to the Town of Minden website at <http://www.townofminden.com>.

Source Name	Source Water Type
Well 1 Water St	Ground Water
Well 4 Ironwood Dr	Ground Water
Well 8 Buckeye Road	Ground Water
Well 2 County Rd	Ground Water
Well 3 County Rd	Ground Water
Well 5 Bougainvillea	Ground Water

We strive to protect your water against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. A copy of the complete source water assessment is available for viewing at the Bureau of Safe Drinking Water (BSDW) Carson City office between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. It is suggested that an appointment be made if you are interested in viewing the report. The BSDW office is located at 901 South Stewart Street, Suite 4001, Carson City, Nevada; telephone 1-775-687-9520.

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both

tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, mining, or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

How can I get involved?

See our Water Conservation Plan on the Douglas County Water Utility Website at <http://www.douglascountynv.gov/index.aspx?nid=256>

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into

the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Additional Information for Lead

Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761).

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-Detects (ND): laboratory analysis indicates that the constituent is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU): nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Water Quality Data

The tables following below list all of the drinking water contaminants, which were detected during the 2013 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2013. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water that is provided to you is safe.**

Testing Results for Town Of Minden

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the Month of July, two samples returned positive and the in the month of August, one sample returned positive	MCL: Systems that collect less than forty samples per Month – No more than one positive sample	0	Naturally present in the environment

Lead and Copper	Date	90 TH Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2011 - 2013	0.55	NA	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	3/4/2013 2/4/2013	13 11	5 – 13 9 – 11	ppb	10 10	0 0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
BARIUM	5/21/2013	0.12	0.05 – 0.12	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	7/16/2012	4	1 - 4	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	5/21/2013	0.2	ND - 0.2	ppm	2	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
NICKEL	7/16/2012	0.003	0.001 - 0.003	mg/L	0.1	0.1	Erosion of natural deposits

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
NITRATE	6/26/2013	0.9	ND - 0.9	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED URANIUM	7/16/2012	5	2 - 5	µg/L	30	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	4/4/2012	2.5	2.5	pCi/L	15	0	Decay of natural and man-made deposits

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
ALKALINITY, BICARBONATE	5/21/2013	174	100 - 174	mg/L		
ALKALINITY, TOTAL	5/21/2013	143	82 - 143	mg/L		
ALUMINUM	8/1/2013	ND	ND	mg/L	0.2	
BORON, TOTAL	5/21/2013	0.2	0.1 - 0.2	mg/L		
CALCIUM	5/21/2013	40	21 - 40	mg/L		
CHLORIDE	7/8/2013	5	<5 - 5	mg/L	400	
COLOR	6/26/2013	<5	<5	CU	15	
CONDUCTIVITY @ 25 C UMHOS/cm	5/21/2013	330	210 - 330	UMHO/cm		
HARDNESS, CALCIUM MAGNESIUM	5/21/2013	141	72 - 141	mg/L		
HARDNESS, TOTAL (AS CaCO ₃)	5/21/2013	100	52 - 100	mg/L		
MAGNESIUM	5/21/2013	10	5 - 10	mg/L	150	
pH	7/8/2013	8.3	8.15 - 8.3	pH	8.5	
SILICA	7/8/2013	36	30 - 36	mg/L		
SODIUM	7/8/2013	20	15 - 20	mg/L	200	20
SULFATE	7/8/2013	19	14 - 19	mg/L	500	
TDS	6/26/2013	212	151 - 212	mg/L	1000	

Violations

During the 2013 calendar year, TOWN OF MINDEN is required to include an explanation of the violation(s) in the table below and the steps taken to resolve the violation(s) with this report.

Type	Category	Analyte	Compliance Period
MCL (TCR), MONTHLY	MCL	COLIFORM (TCR)	7/1/2013 - 7/31/2013
MONITORING, ROUTINE MAJOR	MON	SIMAZINE, ATRAZINE	1/1/2011 - 12/31/2013

Health Information About the Above Violation(s)

The Town of Minden failed to monitor for the Volatile Organic Compounds listed above in 2013. As this system has not previously detected the two contaminants and these were failure to monitor violations and not an exceedance of any Maximum Contaminant Level, no known health effects are believed to have resulted due to

the missed samples. A return to compliance will be achieved by issuance of this public notice and performing all monitoring as required by the State during the calendar year of 2014.

Testing Results for East Valley Water System

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2013				

Disinfection By-Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected results for	2013						

Lead and Copper	Date	90th Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2013	0.15	NA	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	2013	8	6 - 8	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

Health Information About Water Quality

Microbiological

Coliforms are bacteria that are naturally present in the environment and re used as an indicator that other, potentially harmful bacteria may be present. Coliforms were not found in any samples in the East Valley Water System. In the Town of Minden, Coliforms were found in more samples than allowed and this was a warning of possible problems. The Town of Minden had one positive result for Total Coliform in July 2013. They conducted additional monitoring for Coliform at the positive site and one sample both upstream and downstream. The site was positive again while the upstream and downstream tests were negative. They then chlorinated, flushed and re-sampled the site, which came back absent of bacteria. The Town of Minden also had a positive result for Total Coliform in August 2013. They conducted additional testing at the positive site as upstream and downstream and at all the Town's wells all of which showed no evidence of Coliform.

Inorganic Contaminants

Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

The Town of Minden takes five samples for Arsenic in the area around Well No. 8. On February 4, 2013, a reading of 11 ppb was recorded and on March 18, 2013 a reading of 13 ppb was recorded. NDEP allows for a quarterly total summation taken in the distribution system to be used as long as the Running Annual Average (RAA) does not exceed the MCL. The average of the five samples on each date was 9.6 ppb which meets the revised standard of 10 ppb set by the EPA in January 2006. The average for the first quarter of 2013 was 9.4 ppb. Due to tank operations in the Town of Minden and low wintertime flows, Well No. 8 was pumping at a lower volume than normal, and low flows have a tendency to raise arsenic levels.

Consumer Confidence Report: Requests for a copy of this report can be made in writing to Douglas County Public Works, P.O. Box 218, Minden Nevada, 89423 or by calling 775-782-9989. This report is also posted on the Douglas County Water Utility Website <http://www.douglascountynv.gov/index.aspx?nid=256>.

For more information please contact:

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